



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,400	01/22/2004	Kazuhiko Ohnishi	KATA-188	3302

217 7590 11/16/2006  
FISHER, CHRISTEN & SABOL  
1725 K STREET, N.W.  
SUITE 1108  
WASHINGTON, DC 20006

EXAMINER

MESH, GENNADIY

ART UNIT PAPER NUMBER

1711

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/761,400

Applicant(s)

OHNISHI ET AL.

Examiner

Gennadiy Mesh

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 7, 14-25, 29 and 36-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-13, 26-28, 30-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant response on restriction/election requirement filed on January 22, 2004 is acknowledged.

Applicant has elected Group I, Claims 1-13 and 26 – 35.

Applicant also elect following specie:

(i) for substituent – isocyanate group

(ii) for linkage – urethane group.

It is noted that Applicant did not provide listing of all claims readable on elected species. Claims 7 and 29 are withdrawn by Examiner as not readable on elected specie ( non –blocked isocyanate group can not be dissolved or dispersed in water due to chemical reaction).

Claims 7, 14 – 25, 29 and 36 – 41 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Groups II – VII, there being no allowable generic or linking claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1- 6, 8 - 10, 12-13 and 26 – 28 and 30 – 32, 34 - 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Cook( US 5,138,006).

Art Unit: 1711

Regarding Applicant's Claims 1 – 5, 9-10,13, 26,27, 32 and 35 Cook discloses photocurable coating composition, comprises modified starch ester-urethanes containing residual hydroxyl groups with an ethylenically unsaturated isocyanate , capable of undergoing crosslinking reaction on exposure of UV radiation in a presence of photoinitiators and catalysts( line 18 – 24,column 7) and ethylenically unsaturated monomers or oligomers.( see abstract).

Regarding Applicant's Claims 6, 8, 28 and 30 Cook discloses that composition in powder form ( see Example 6,line 57 –61, column 9) and discloses that composition can be dissolved in organic solvents( see line 1-18,column 7 and claim 9).

Regarding Applicant 's Claims 12 and 34 Cook discloses that composition can be used as protective coating( see abstract).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook as applied to claims 1- 6,8 - 10,12-13 and 26 – 28 and 30 –32, 34 - 35 above, and further in view of Nahm (US 4,861,629).

Cook silent about use of colorant in modified starch based curable composition.

Art Unit: 1711

However, Nahm discloses use additives, including pigments or dyes ( see lines 27 – 35,column 8) in photocurable coating composition, comprising modified cellulosic polymer reacted with at least one hydroxyl reactive isocyanate( see abstract) and further teach that selection of additives, preferably transparent to radiation( photo) will depends on the specific end uses contemplated for the coating.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add colorant per teaching of Nahm to composition of Cook in order to obtain colored protective coating for application where specific color is necessary.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gennadiy Mesh whose telephone number is (571) 272 2901. The examiner can normally be reached on 8a.m - 4 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Art Unit: 1711

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gennadiy Mesh  
Examiner  
Art Unit 1711



\*\*\*



James J. Seidleck  
Supervisory Patent Examiner  
Technology Center 1700